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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,628	10/10/2001	Tetsuya Yokoyama	Kansai-18	8482

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EXAMINER
ZIMMER, MARC S

ART UNIT	PAPER NUMBER
1712	

DATE MAILED: 09/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/974,628	Applicant(s) YOKOYAMA ET AL.	
	Examin r Marc S. Zimmer	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 February 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 7-11* is/are rejected.

7)☒ Claim(s) *4-6* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *3* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Claim Objections

Claims 4-6 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Applicant is advised, however, that the limitations of claims 4 and 5 are not readily understood and would be subject to a rejection under 35 U.S.C. 112 upon resolution of the aforementioned claim objection. Claim 4 essentially recites a composition having a "polymer... present in an amount of about from 20 to 90% by weight based on a total amount of the unsaturated monomers used in the last stage.... " It is not at all clear what this limitation means. Claim 5 contains similar language and does not even seem to represent a complete idea.

Claims Analysis

It is the position of the Office that the phrase "anionic electrodeposition" in the preamble is merely a statement of intended use as in "a composition for coating via an anionic electrodeposition technique. Section 2112.02 provides direction as to how phrases such as this are to be treated: "If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir.

1999). See also *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997) ("where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation"); *Kropa v. Robie*, 187 F.2d at 152, 88 USPQ2d at 480-81 (preamble is not a limitation where claim is directed to a product and the preamble merely recites a property inherent in an old product defined by the remainder of the claim). Because the emphasized phrase above does not meet the criteria set forth in the aforementioned ruling, i.e. does not define an aspect of the invention recited in the body of the claim, this limitation will not be given patentable weight.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 7, 8, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takaya et al., U.S. Patent # 5,332,766. Takaya discloses a water-dispersible resin composition comprising (i) an emulsion of a core/shell-type particulate polymer prepared by the approach broadly outlined in column 3, lines 5-45, (ii) a hydrophobic crosslinking agent such as those delineated at column 10, lines 24-28, and (iii) a water soluble resin (acrylic, alkyd) having a quantity of hydrophilic groups, e.g. carboxyl and hydroxyl groups (column 11, lines 3-19). Component (iii) is blended with component (ii) in an amount corresponding 20 to 100 parts by weight of the former

relative to 100 parts by weight of the latter (column 11, lines 23-27) prior to their combination with component (i) to enhance the miscibility of (i) and (ii). According to column 11, lines 41-44, the crosslinking agent constitutes between 10 and 50 wt. % of the entire solids content of the composition. By extension, the water-soluble resin will constitute between 2 and 50 wt. % of the total solids content insofar as (iii) is added as 20 to 100 parts relative to 100 parts of (ii). As for the core-shell polymer, which is equivalent to component (b) of the instant invention, its quantity is only reported in terms of its contribution to the weight of the emulsion (column 9, lines 1-6) but Applicant has not established criticality for this parameter. Furthermore, embodiments wherein the emulsified polymer makes up 5 to 40% by weight of the total weight of the composition are obvious in view of the relative contributions of (ii) and (iii) disclosed by the reference.

Preparation of the core-shell type polymer is described in great detail in columns 3 to 8. There are three main steps in the synthetic method disclosed therein. First, 99-90 wt.% (column 5, lines 43-48) of a vinyl monomer that is preferably (column 5, lines 7-9) one of the monomers categorized as type (1), (2), (3), or (11) in column 4 is copolymerized with 1-10 wt.% of a silicon group-functionalized, ethylenically-unsaturated monomer in an aqueous medium in the presence of a surfactant thus forming a particulate polymer. Subsequently, said particulate polymer is reacted with a second amount of silicon group-functionalized monomer and/or allyl (meth)acrylate (column 6, lines 54-58). In the final step, the product of the previous manipulation is reacted with another vinyl monomer solution comprising between 1 and 50% by weight

of a carboxyl group-containing monomer and optionally up to 10% by weight of a silicon group-functionalized monomer. According to column 5, lines 34-43, the amount of monomer employed in the first step comprises preferably between 60 and 90% by weight of the total quantity of monomer material used in carrying out steps 1 and 3. The amount of silicon group-functionalized monomer made available in step 2 is between 0.5-2 times the quantity of the same used in step 1.

Due to the convoluted manner in which the amounts of the different vinyl monomers are disclosed, it is difficult to ascertain precisely how much of the emulsified polymer is derived from silane-functionalized monomer, especially since the wt. contribution of the monomer added in step 2 is not expressly revealed. Nonetheless, it is clear that the lower end of the range recited in claim 1 will be satisfied by the reference and the upper end of the range is not exceeded given the relatively small contribution of this material in steps 1 and 3.

It is conceded that Takaya does not describe their invention as being a coating of the electrocoating-type. Nonetheless, a composition taught by the prior art that chemically mirrors that of claim 1 is inherently capable of being electrocoated onto a substrate. "[P]roducts of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). See also *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "Where the claimed and prior art products are

identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established."

As for claims 8, 10, and 11, the reference teaches that the composition described by the reference may be used to coat outer panels of vehicles and electrical appliances (column12, lines 47-53).

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takaya et al., U.S. patent # 5,332,766 in view of Harakawa et al., U.S. patent # 4,980,409. Takaya only states that the water-dispersible resin (iii) will have some quantity of hydroxyl and carboxyl groups but does not advocate a specific number of each (usually expressed as hydroxyl value and acid value respectively.)

Harakawa discloses an aqueous matte composition that resembles the instant invention and that taught by Takaya in numerous respects wherein component (A) correlates with component (b) of the instant invention and component (i) of the prior art composition, component (B) correlates with component (c) of the instant invention and component (ii) of the prior art composition, and component (C) correlates with (a) of the instant invention and (iii) of the prior art composition. Harakawa states that the acid value and hydroxyl value of component (C) is preferably between 15 and 150 and 30-150 respectively (column 3, lines 38-60) because (1) copolymers having an acid value below 15 are not easily dispersed in water, (2) copolymers having an acid value above 150 have low water resistance, (3) copolymers having a hydroxy value lower than 30 possess inadequate film-forming properties, and (4) copolymers having a hydroxy value

above the maximum also have poor water resistance. In view of these teachings, one of ordinary skill in the art would, when practicing Takaya's invention, be motivated to judiciously select component (iii) such that it adheres to the property limitations recommended by Harakawa.

As for claim 9, aluminum panels are exemplary of the substrates that may be coated with Harakawa's invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 703-605-1176. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on 703-308-2340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

August 20, 2003

Robert A Dawson

Robert Dawson
Supervisory Patent Examiner
Technology Center 1700